

Assessment of Infant and Young Child Feeding (IYCF) Practices: A Community Based Study at Kanpur District, Uttar Pradesh

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ABSTRACT

The practice of infant and young child feeding (IYCF) is critical for child's growth and development throughout the first two year of life. poor feeding habits in early childhood contribute to malnutrition and child mortality in India. The world health organisation (WHO) recommends exclusive breastfeeding for the first six months of life with continued breast feed until at least the age of two. **Objective:** To assess the IYCF practices in children under the age of 6-23 months of age. **Materials and methods:** Ethical approval was taken from Banaras Hindu University, Varanasi and written informed consent was obtained from mothers. The study was conducted in Kanpur, Uttar Pradesh from November 2022 to May 2023 on 100 infants and their mothers. Purposive sampling technique was used the World Health Organisation and IYCF questionnaire, was used to collect house to house data. An appropriate statistical test was used to analyse the data. **Result:** according to findings 55 percent of babies under the age of 6-23 months were nursed within the first hour of delivery. about 67 percent babies were exclusively breastfed. approximately 65 percent infants were given pre-lacteal feeds and 55 percent were bottle fed. In addition to breastmilk half of the babies aged 6-8 months had solid, semi-solid or soft meals. **Conclusion:** Exclusive breastfeeding (EBF) has been practiced in more than two-thirds of children, but early breastfeeding is practised in more than half of children.

Keywords: Infants, exclusive breastfeeding, IYCF (infant and young child feeding practices), Knowledge.

I. INTRODUCTION

Next to foetal period, infant's first year is the time of most rapid growth. according to WHO the average weight of most healthy new born babies is around 3.2 kg. Healthy child doubles his weight by 6 months and the time of one year old his weight becomes 3 times. Normal birth length of baby is 50-55 cm and at the age of one year it increases 23 to 25 cm. the most determinant of child survival, birth spacing and prevention of childhood infection is breastfeeding. (S. Deblina et.al., 2020)³. Feeding is crucial for survival of child.

It is estimated that under nutrition causes 2.7 million child deaths each year, accounting for 45 percent of all child deaths. Incidence of morbidity and mortality among infants and young children could be significantly reduced by optimal feeding. In most of the formidable circumstances, breastfeeding is the desired method of infant feeding (S. vartika et.al.,2022)¹

According to the World Health Organization and United Nations Children's Fund, breastfeeding should begin within an hour of birth, exclusive breastfeeding for six months and initiation of complementary feeding along with breastfeeding from six months of birth.⁴

Infants and young children are at an increased risk of malnutrition from six months of age onwards, when breast milk alone is no longer sufficient to meet all their nutritional requirements and complementary feeding should be started. Initiating complementary feeds too early or too late can lead to malnutrition. In India, both early and late initiation of complementary feeding is common

The Third National Family Health Survey (NFHS- 4) of India reported that overall, 41.6% of children aged under 3 years were breastfed within 1

h of birth, 54.9% of the children between 0 and 5 months were exclusively breastfed, and 42.7% of the children aged between 6 and 9 months are received solid or semisolid food along with breast milk.⁵

The practice of breastfeeding among Indian mothers is universal, but initiation of breastfeeding is quite late and the colostrum is usually discarded (S.Deblina et.al.,2020)³

It has been shown in many studies that mothers in India are unable to start complementary feeding at the right time.so, the present study was undertaken with the objective to assess the knowledge and practice of complementary feeding among infants of (6 -23) months of age

II. MATERIALS AND METHODS

Study setting: Total population of Kanpur is 45.73 Lakh (census 2011) Kanpur is divided into 6 zones. The zones are further divided into wards. There are 110 wards in this city Random selection of 2 wards kalyanpur (awas Vikas) and Ambedkar Nagar out of which 5 mohallas via lottery method were selected from each ward. a door-to-door survey will be continued with the help of ASHA health workers along with predesigned questionnaire till the required sample size will be recorded.

Study procedure: A community based cross – sectional study was conducted for 7 months A meeting was conducted with ANM and ASHA of PHC and a list of mothers having children below 2 years of age was obtained from them. After obtaining the written consent of the study participants mothers, an interview was conducted by a field researcher. Information about younger children was collected if the mother had multiple children under the age of 2 years in the family. A set of questions was used to assess the knowledge of mothers and pattern of complementary feeding among infants. Assessment of the anthropometric measurement weight, height, MUAC and head circumference was done with the weighing scale and measuring tape. Mothers were encouraged to continue giving complementary foods to the infant, their doubts were cleared and pattern of existing complementary feeding were observed.

Sample size: using probability proportional to size (PPS) 100 children were taken as study subjects we use simple random sampling to select the first house to investigate, next we surveyed each household with children under 2 years of age until the desired number of children was recorded.

Inclusion criteria

1. Infants and young children between 6-23 months of age
2. Children who have breastfeed
3. Children who have started eating complementary food.

Exclusion criteria

1. Infants and children above 2 years and below 6 months of age.

Study tools

Pre- designed and semi-structured questionnaire based on the standard questionnaire on IYCF practices given by WHO was used to collect information after obtaining participant's informed written consent. The research tools consist of interview-based questionnaire. the questionnaire consisted of two parts one part was used to obtain information about mother and children socio-demographic characteristics. The second part was used to record information how to feed. In accordance with WHO recommendations, information about children's diet was collected over the past 24 hours, including type of food & no. of meals. few questions related with sanitation and hygiene of mother were also included

Statistical analysis

The information gathered was imported into "Microsoft Excel" and analysed with Statistical Package for the Social Sciences version 16. Data management tools were utilized to avoid duplication and error in data entry. The quantitative data were presented in the form of frequency and proportions. To compare differences, we applied the Chi-square test between groups. Statistical significance was defined as p value <0.05.

III. RESULTS

In Table 1, among 100 mothers, 65 percent belong to the age group of 20-30 years. Majority 44 percent of mothers had completed graduation followed by intermediate education 20 percent. About 4 percent mothers were found to illiterate. Majority 70 percent of mothers were housewives and 75 percent living in nuclear family. About 31percent and 40 percent of mothers belong to middle and lower middle socio-economic class, respectively.

Table 2 depicts that in this study, 100 children below 2 years of age were included and 58 percent of them were 6-12 months old. About 64 percent children were males and 36 percent

children were females. About 56 percent children were first born child.

Table 3 depicts the status of IYCF indicators among male and female children (0-23 months). among all the IYCF indicators there were no statistically significant difference in proportion of male and female children for indicators namely early initiation of breastfeeding among children below 2 years of age, EBF continuing breastfeeding

among children (12-23 months) bottle feeding among children less than 6 months , received colostrum and pre lacteal feeds(0-23 months) , whereas statistically difference was found in proportion of male and female children for indicators like bottle feeding among children (6-23 months) of age, introduction of solids, semi-solids and soft food among children of age 6-8 months minimum meal frequency 6-23 months .

TABLE 1: SOCIODEMOGRAPHIC PROFILE OF THE MOTHERS OF THE RESEARCH PARTICIPANTS

(N= 100)		
VARIABLES	FREQUENCY	PERCENTAGE
MOTHER’SAGE (YEARS)		
20-30	65	65
31-40	35	35
EDUCATIONAL QUALIFICATION		
POSTGRADUATE	8	8
GRADUATE	44	44
INTERMEDIATE	19	19
HIGH SCHOOL	17	17
MIDDLE SCHOOL	2	2
PRIMARY SCHOOL	6	6
ILLITERATE	4	4
WORKING STATUS OF MOTHER		
YES	33	33
NO	67	67
TYPE OF FAMILY		
NUCLEAR	75	75
JOINT	25	25
SOCIOECONOMIC STATUS		
UPPER	15	15
UPPER MIDDLE	31	31
LOWER MIDDLE	41	41
UPPER LOWER	6	6
LOWER	7	7

*As per modified kuppu swami scale

TABLE 2: SOCIODEMOGRAPHIC CHARACTERSTICS OF CHILDREN (0-23 MONTHS)

(N= 100)		
VARIABLES	FREQUENCY	PERCENTAGE
GENDER OF CHILD		
MALE	64	64
FEMALE	36	36
CHILD’S AGE		
6-12 MONTHS	58	58
12-23 MONTHS	42	42
BIRTH ORDER		
1	56	56
2	39	39
3	5	5

TABLE 3: STATUS OF IYCF PRACTICES AMONG CHILDREN (0-23 MONTHS)

IYCF INDICATORS	STATUS	MALE %	FEMALE %	TOTAL %	CHI-SQUARE	P VALUE
Early initiation of breastfeeding (within 1 h of birth) among children <24 months	Yes	34 (35.2)	21 (19.8)	55	0.085	0.769
	No	30(28.8)	15 (16.2)	45		
Exclusive breastfeeding for first 6 months	Yes	47(42.88)	20(24.12)	67	2.57	0.108
	No	17(21.12)	16(11.88)	33		
Continuing breastfeeding AMONG CHILDREN (12-23 MONTH)	Yes	47(42.88)	20(24.12)	67	2.57	0.108
	No	17(21.12)	16(11.88)	33		
Bottle feeding among children(6-23 months)	Yes	34(35.2)	21(19.8)	55	0.085	0.769
	No	30(28.8)	15(16.2)	45		
Received colostrum (0-23 months)	Yes	58(56.32)	30(31.68)	88	0.572	0.449
	No	6(7.68)	6(4.32)	12		
Given pre-lacteal feeds as water and honey (0-23 months)	Yes	42(41.6)	23(23.4)	65	0.0019	0.965
	No	22(22.4)	13(12.6)	35		
Introduction of solid, semi-solid or soft foods among children (6-8 months)	Yes	58(49.92)	20(28.08)	78	0.572	0.449
	No	6(14.08)	16(7.92)	22		
Minimum meal frequency among children (6-23 months)	Yes	37(36.48)	20(20.52)	57	0.047	0.993
	No	27(27.52)	16(15.48)	43		

IV. DISCUSSION

According to NFHS-4 the percentage of breastfed children in urban Uttar Pradesh so far is

(44.7%) which is in better agreement with our study that 55% of children had been breastfeed so far. however positive effect and support can be

helpful and negative effect can interfere with the breastfeeding process. Patil.et.al., (2009) came up with similar result where 47.5 % of babies were breastfed as their first diet.

According to IYCF Guidelines, the Indian Government recommends that breastfeeding should be started immediately after delivery, preferably within an hour of birth. Mother's illiteracy, low socioeconomic status, incorrect practices and beliefs and decreased milk production can attribute to her late breastfeeding habit. This suggests that the women were not adequately motivated to start breastfeeding immediately after birth.

This study revealed that delayed breastfeeding (>1 hr) is still practised in urban areas of Uttar Pradesh (45 percent). Low rates of early onset of breastfeeding were also documented by Kumar et al. 5& Chatterjee et al.6 where breastfeeding initiation within 1 hr of delivery was found to be only 6.3 percent and 14.54 percent, respectively.

In our study 88 percent babies were fed colostrum which matches well with the findings of Saxena et.al., (2021) The increased awareness of study participants for colostrum may be due to increased awareness of healthcare workers in our area.

V. CONCLUSION AND RECOMMENDATION

While EBF rates in the research group were adequate, the study clearly shows that numerous incorrect feeding behaviours must be eliminated in order to preserve the health and nutrition of young infants. The results of this study clearly underscore the importance of educating women about infant feeding practices not only in terms of diversity but also in terms of meal frequency.

It is vital to educate women and their families about correct IYCF practices, therefore the IYCF education programme should be emphasised during all interactions with eligible women and their families, and it should be done on a regular basis during prenatal and postnatal clinics, as well as when mothers come for their child's immunization. Strengthening breastfeeding at the medical institution and community level requires in-service training for health professionals, frontline workers, and managers.

The children are the pillar of nation so by improving the health of all children we will be able to turn our country into healthy nation

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Conflicts of interest

There are no conflicts of interest.

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